IN THE SPECIFICATION:

Please replace the paragraph beginning on page 1, line 5, with the following rewritten paragraph:

--The present invention relates to manufacturing processes and articles made by these processes and, more particularly, to a thermoforming method of fabricating three-dimensional solids, "solid surface" materials and acrylics that have a seamless depression or projection capable of holding a liquid and that simulate natural materials, such as stone, granite, or marble.--

Please replace the paragraph beginning on page 1, line 15, with the following rewritten paragraph:

--In recent times, the use of artificial stone materials for kitchen counter-tops, basins, tubs, and other fixtures has become very popular with contractors and property owners alike. These materials have the look of granite, marble and other expensive stone materials, but are less costly to fabricate and shape. These artificial stone materials usually

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comprise acrylic and acrylic/alumina trihydrate (Wilsonart®, Gibraltar®, SSVTM, DuPont Corian®), and are also known in the trade as "solid surface materials".--

Please replace the paragraphs beginning on page 2, line 4 and ending on page 3, line 8, with the following rewritten paragraphs:

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--In the manufacture of bowls, tubs, counter-tops, and basins of artificial stone-like materials, some manufacturers laminate or chemically weld multiple pieces of "solid surface" sheet stock together, and then machine the pieces to the desired shape. Some manufacturers mold "solid surface" material using two-piece (male/female) molds to create a basic form, and then cut and splice pieces to the deformed shape to achieve the depth and size that they ultimately desire. These methods require more labor and machinery to finish the surfaces, such as sanding the laminated or welded item, and therefore are more time, labor, and material intensive. The intensive nature of these artificial materials has kept the cost of the end products high.

--The present invention features a low-cost, thermoforming process that is used to make three-dimensional "solid surface" bowls, shower pans, trays, kitchen countertops, and basins. The inventors have discovered that thermoforming is a cost effective method for overcoming the prior art manufacturing limitations of these materials. The inventive process uses a flat, rigid sheet of "solid surface" product that is heated to a uniform temperature to make it malleable. The material is then placed over a female or male mold and formed to a predetermined shape utilizing vacuum. The heated material is allowed to conform to the mold shape without substantial restraint, until most of the desired deformity is achieved. At that point, movement of the material becomes restricted; the balance of the desired deformity is achieved through stretching. The manufactured component is then allowed to cool in its restrained position, until rigid.--

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Please replace the paragraphs beginning on page 3, line 19 and ending on page 4, line 7, with the following rewritten paragraphs:

--The inventive process allows formation of a shower base, sink, bowl, or other fixture in one piece, which can retain its shape without losing its strength and integrity. Most particularly in the case of a shower base or tub, further strengthening can be achieved using polyurethane foam. The polyurethane foam can be poured or sprayed onto the "solid surface" material.

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--The inventive method is unique in that no other current process can fabricate "solid surface" fixtures in one piece using a vacuum and producing a flanged, seamless cost efficient fixture.--

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Please replace the paragraph beginning on page 4, line 12, with the following rewritten paragraph:

--In accordance with the present invention, a fixture is fabricated from a "solid surface" material in one thermoforming process. The process uses a flat, rigid, single sheet of "solid surface" product that is heated to a uniform temperature to make it malleable. The material is then placed over a female or male mold, and formed to a predetermined

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shape utilizing a vacuum. The heated material is allowed to conform to the mold shape without substantial restraint, until most of the desired deformity is achieved. At that point, movement of the material becomes restricted; the balance of the desired deformity is achieved through stretching. The manufactured component is then allowed to cool in its restrained position, until rigid. This procedure produces a flange, which provides a point at which, for example, the bowl/shower pan can subsequently be chemically welded in either a convex or concave position. After cooling, the material is removed from the mold and chemically welded to a countertop or curb assembly, in either a horizontal or a vertical plane. A supporting plate is welded at the desired drain location. A drain hole is then machined at the drain location to accommodate the drain hardware.--

Please replace the paragraphs beginning on page 7, line 14 and ending on page 8, line 18, with the following rewritten paragraphs:

--Generally speaking, the invention features a thermoforming method of fabricating a fixture comprising a

single sheet of "solid surface" material. The sheet is heated to a uniform temperature to make it malleable. The malleable material is then placed over a female or male mold, and formed to the shape of the fixture, utilizing a vacuum. The heated material is then allowed to conform to the mold shape without significant restraint, until the desired deformity is substantially achieved. At that point, movement of the material becomes restricted; the balance of the desired deformity is achieved through stretching. The manufactured fixture is then allowed to cool in its restrained position, until rigid.

--Now referring to FIGURES 2, 6, and 7, the mold fixture components 10 used in the fabrication of a shower pan 18, as shown in FIGURES 4 and 5, in accordance with the present invention, ~~is~~ are illustrated. The mold components used in the thermoforming process of the invention~~,~~ comprise a medium density fiberboard (MDF) mold 12, ~~that~~ which is attached at its center hole 14 to a vacuum-providing conduit 16. It should be understood that other easily shaped and non-heat retentive materials can be used in place of or in conjunction with MDF material. The shower pan 18 or other fixture is

thermoformed using a single sheet 18a of "solid surface" material. The fixture that can be fabricated by the process can comprise a bowl (including but not limited to toilets, tubs, basins, etc.), sink, tray, birdbath, shower pan, etc., or any other article requiring the forming of a depression or projection in a "solid surface" material that can hold a liquid.--

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Please replace the paragraphs beginning on page 9, line 3 and ending on page 9, line 20, with the following rewritten paragraphs:

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--Step 1: A single sheet of "solid surface" material 18a (FIGURE 2) is cut to a desired size that corresponds to the size of the shower pan or other product that is to be fabricated.

--Step 2: The piece of material 18a is placed into a heating device (oven) to raise the temperature of the piece to a desired thermoforming temperature, the temperature gradient being in the approximate range of between 280°F - 355°F. In accordance with certain "solid surface" material

manufacturers' instructions, the material may be annealed prior to and/or after performing step 2.

--The piece of material being used to form the bowl/shower pan is heated for a period dependent upon its thickness. For example, 1/8" of SSV™ material is heated for a minimum of 6 minutes within the aforementioned temperature range. The sheet material 18a can remain for an indefinite period in this heated state, until the operator is ready to remove it, place it in the mold 12, and apply a vacuum 16 to the mold 12.--

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Please replace the paragraph beginning on page 10, line 5, with the following rewritten paragraph:

--A typical ~~"~~solid surface~~"~~ material includes an acrylic plastic with a filler of alumina trihydrate of 20 to 85% by weight. The material is manufactured under the various trade names including but not limited to: Wilsonart®, Gibraltar®, SSVTM, and Dupont Corian®. Typical material thicknesses useful for thermoforming in accordance with the method of this

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invention, include 1/8" inch, 1/4" inch, 3/8" inch and 1/2" inch.--

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Please replace the paragraphs beginning on page 10, line 17, and ending on page 11, line 14, with the following rewritten paragraphs:

Step 4: An appropriate amount of vacuum is then gradually applied, with only the weight of the retention ring 15 resting upon the material. The material 18a is vacuum formed into the mold 12, to a point of substantial deformity. The deformity is virtually unrestricted by pressure around its perimeter. When the substantially desired deformity is attained, full pressure is applied to the retention ring 15. Full pressure causes the top of the shower pan flange portion 11, shown in FIGURE 5, to remain flat and wrinkle free. The deformity of the material should occur slowly (approx. 5-10 sec.) in order to prevent excessive stretching of the material. Excessive stretching is not desirable, because it results in "whiting" at the edges and corners. Excessive stretching is also undesirable aesthetically and, additionally, may weaken the material.

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--Step 5: Both the retention ring 15 and the vacuum restrain the deformed piece of "solid surface" material 18a until it cools to the point where it will retain its shape. This is dependent on the temperature to which it has been heated, the thickness of the material used, and ambient temperature.--

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Please replace the paragraph beginning on page 11, line 20, with the following rewritten paragraph:

--A frame 17 (e.g., wooden, metal, etc.) is used to hold the retention ring 15 in place. This procedure produces a flange 11, as aforementioned, which provides a point at which, for example, the bowl/shower pan 18 can be subsequently chemically welded via suitable adhesive that is recommended by the "solid surface" material manufacturer in either a convex or concave position to a countertop or curb assembly. After cooling and removal from the mold 12, the material is subsequently chemically welded to the countertop or a curb assembly in either a horizontal or a vertical plane. A supporting plate 19 is welded at the bottom of the drain hole

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20, when the end product warrants a drain, as shown in FIGURE 4.--

Please replace the paragraph beginning on page 12, line 18, with the following rewritten paragraph:

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--The center spring-loaded elevator 22 is placed in hole 14 of the mold 12, as shown in FIGURE 7, and acts to regulate the vacuum pressure during the forming process. The top disc 23 closes over the hole 14 against the biasing of spring 21, when the vacuum pressure becomes too high. At this point, the vacuum veins 12a (FIGURE 1) act as a bleeder point between the mold 12 and the "solid surface" material 18a, which allows air remaining between the mold 12 and the "solid surface" material 18a to be fully evacuated. When the molding process is complete, and at the time the counter-top or curb is welded to the flange 11, a drain plate 19 is placed under hole 20 to complete the shower base product 18 (FIGURE 4).--